

ABSTRACT OF THE DISCLOSURE

A head stabilizing system is provided. The head stabilizing system is intended to minimize loads on the head and the neck, some of which may be injurious or even fatal, by generating a reaction force that substantially opposes a force acting on the head and generated by rapid deceleration of a vehicle or a crash impact. The head stabilizing system includes a helmet, a connection structure, and at least one resisting member. A mounting element is provided to be mounted onto the helmet to connect to the at least one resisting member. The mounting element is preferably attached to the helmet by an adhesive. The resisting member generates a reaction force that opposes the crash impact force, yielding a reduced net force on the head. This reaction force can be generated as a function of position, velocity or acceleration. The resisting member may include a tether, a dashpot, or a dashpot containing a controllable rheological fluid. The viscosity of the controllable rheological fluid can be automatically adjusted in response to changes in status of a vehicle or it's occupant.